# A Physician's Education

# A physician's education continues throughout his or her entire career.

#### College

While in college, a student who wants to become a physician takes science courses including biology, physics, and chemistry. A bachelor's degree from a 4-year college is usually required before applying to medical school.

#### **Medical School**

Medical school usually lasts for 4 years. In many schools, the first 2 years are mostly in a classroom. Students are taught about health and disease. They learn about topics such as the cardiovascular (heart and blood vessel), pulmonary (lung), and neurological (brain and nerve) systems.

Medical schools are usually connected with teaching hospitals. During the last 2 years of medical school, students learn in a teaching hospital. They apply what they learned in the classroom to patients. They also learn about different **specialties** (areas of medicine). Some specialties are internal medicine, pediatrics, neurology, surgery, psychiatry, family medicine, and obstetrics/gynecology. Students decide what kind of physician they want to be during the last year of medical school.

Students graduate from medical school with an MD (doctor of medicine) degree or a DO (doctor of osteopathy) degree. Having either of these degrees means a person is a physician.

#### Residency

After medical school, most physicians complete a **residency** in a teaching hospital. Residency programs train physicians in a particular medical specialty. First-year residents are called interns. Residency can last from 3 to 7 years depending on the specialty. During residency, physicians learn about different aspects of their chosen specialty. For instance, a pediatrics resident will learn to take care of children in the office, in the emergency room, and in the hospital.

Many states require physicians to have a training medical license during residency. Physicians who graduate from a US medical school are usually eligible for a full medical license after 1 to 2 years of residency. A full medical license is mandatory for physicians to practice medicine independently. A medical license is valid only in the state that issues the license. After residency, physicians have the option of becoming certified by the board (organization) that oversees their medical specialty. To be **board certified**, they must complete an accredited residency and show enough knowledge to pass a rigorous examination.

## **Fellowship**

Some physicians continue training in a **fellowship** program. These are physicians who seek advanced training in a **subspecialty** (one



aspect of a specialty). For instance, some physicians focus on cardiology or pulmonology. A surgeon might focus on trauma surgery. Fellowship most commonly lasts from 1 to 3 years depending on the subspecialty.

### **Continuing Education**

The field of medicine is continually advancing. Staying knowledgeable requires lifelong learning. To keep a state medical license valid, a practicing physician must document continuing education by, for example, taking online or in-person courses. Most physicians who are certified in a specialty also have to fulfill **Maintenance of Certification (MOC)** requirements. These requirements are monitored by a national organization called the American Board of Medical Specialties. One MOC requirement is that physicians retake a certification examination regularly, about every 10 years. They might also publish scientific articles and take part in quality improvement projects.

#### FOR MORE INFORMATION

Association of American Medical Colleges www.aamc.org/download/68806/data/road-doctor.pdf

American Board of Medical Specialties www.abms.org/board-certification/steps-toward-initial -certification-and-moc/

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